

REMARKS:

Claims 1-14 are pending and stand rejected.

Claims 13 and 14 have been amended to more clearly state that the layers described in these claims are additional layers to the film of claim 1.

The Specification – Example 1 – was amended to correctly label the functionalized PMMA used in the Example.

It is believed that no new matter has been added by these amendments.

35 U.S.C. §112

Claims 6, 7, 13, and 14 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically:

Claim 6 cites “core/shell type” for which there is insufficient antecedent basis. Applicant respectfully disagrees. Claim 6 adds the limitation that the acrylic elastomer is of the core/shell type. There is no antecedent issue, since claim 6 refers to “the acrylic elastomer” which is listed on line 5 of claim 1. The Examiner also contends that Applicant fails to “provide the essential guidance that the core/shell is.” Core/shell polymers are very well known in the art. Applicant has also devoted 5 pages of the Specification to describing core/shell elastomers of the invention, starting on page 19, line 15 and going to page 24, line 7 of the original Specification. Applicant believes that 5 pages of explanation in the Specification, plus the Examples, plus general knowledge in the art of what a core/shell elastomer is sufficient to provide the average person in the art the guidance needed to understand and practice Applicant’s claims.

Claim 7 claims a “peelable protective layer” for which the Examiner contends is not defined and therefore indefinite. Applicant respectfully disagrees. First, one in the art of forming thermosets using PVDF would understand that a “peelable protective layer” is a temporary layer often used to protect a PVDF and other plastics during film handling. Applicant describes a “peelable protective layer” on page 27, line 11 to page 28, line 9 in such a manner that one in the art would understand and practice.

Claim 13 recites the limitation “a layer consisting essentially of functionalized PMMA” for which the Examiner contends has no antecedent basis. Applicant has amended claim 13 to

more clearly cite that claim 13 is to the film of claim 1 that has an additional layer attached to the adhesive layer on the side opposite that of the thermoset. Support for this amendment is found on page 4, lines 19-23 of the original specification.

Claim 14 the term "Use" which has been removed by amendment. As with claim 13 described above, Applicant has amended claim 14 to more clearly cite that claim 14 is to the film of claim 1 that has an additional layer attached to the adhesive layer on the side opposite that of the thermoset. Support for this amendment is found on page 4, lines 19-23 of the original specification.

35 U.S.C. §103(a)

Claims 1-5 and 8-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Araki et al, US 6,479,161 in view of Kappler et al, US 4,990,406 or Ohmori et al, US 4,581,412.

Araki

The Araki reference fails to teach or suggest all of Applicant's claim limitations, and thus fails to present a *prima facie* case of obviousness. The Araki reference describes a means for adhering a fluorine-containing polymer to a substrate material by using an adhesive having some carboxyl-functionalized fluoropolymer to aid in the adhesion. The Araki adhesive layer is a copolymer of 0.05 – 30 mole percent functionalized fluoromonomer and 70 – 99.9 mole percent of non-functionalized fluoromonomers. While the Specification does allow for the incorporation into the copolymer of "other monomer copolymerizable therein", no such copolymer is present in any of the Examples. The difference between the Araki teaching and Applicant's claims are many.

Araki requires at least 70.5 mole percent of the adhesive to be fluoropolymer (functionalized or unfunctionalized). Applicant claims an adhesive layer having up to 60 parts by weight of PVDF. Applicant's < 60% PVDF is outside the > 70.5%PVDF taught by Araki – thus the Araki reference cannot anticipate or suggest Applicant's claim limitation of <60% PVDF.

Further differences include:

- a) Araki prefers that 100 percent of the adhesive be fluoropolymer (functionalized and unfunctionalized) as seen in the Examples – thus teaching away from Applicant's requirements of PMMA.
- b) In the Araki reference, a functionalized PVDF is taught. There is no teaching or suggestion of a PMMA, much less the 10-100 parts of functionalized PMMA of Applicant's claims.
- c) In the Araki reference, any acrylic monomer that may be present is c]polymerized as part of the fluoropolymer. In Applicant's claims the functionalized PMMA is blended with PVDF, rather copolymerized with it.

Thus, the Araki reference not only fails to teach or suggest all of Applicant's claim limitations, it requires a level of fluoropolymer far above the limitation of Applicant's claims – teaching far away from Applicant's claims. One in the art would not be motivated by a Araki's teaching requiring 70.5 to 100 % fluoropolymer to practice Applicant's claims requiring less than 60% PVDF.

Kappler

The Kappler reference is a secondary reference cited to show that an acrylic resin and a fluoro-terpolymer may be blended and used as a coating or lining. The acrylic resin of the Kappler reference may contain functional groups. First there is no motivation to combine the references. Secondly, the Kappler reference fails to heal all of the deficiencies of the Akari reference, thus the combination fails to present a *prima facie* case of obviousness.

The Akari reference is to an adhesive, while the Kappler reference is to a lining or coating. These are different art areas, with different requirements. The Akari adhesive is a white powder that is melt-laminated and meant to have adhesive properties on both sides. The Kappler coating is a solvent solution. One of skill in the separate arts of coatings and adhesives would not be motivated by the other art areas.

Even if the references are combined, the Kappler reference fails to heal all of the deficiencies of the Akari reference. In the Akari reference, the total fluoropolymer is at least 70.5 percent. In the Akari reference examples, the weight ratio of the fluoropolymer to all of the resins is 70% (column 5, lines 11, and 12.) Thus both references teach and suggest a level of fluoropolymer far higher than the "up to 60 parts of PVDF" claimed by Applicant. Both

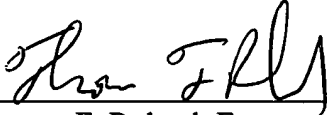
references also teach away from Applicant's claims by teaching these high levels of fluoropolymers, and would not motivate one in the art to practice Applicant's claims.

Ohmori

The Ohmori reference is similar in teaching and deficiencies to the Kappler reference described above. The Ohmori reference teaches a an emulsion or solvent coating which has useful protective properties due to the presence of fluormonomers – but has nothing to do with an adhesive – and especially an adhesive used to adhere a PVDF and/or PMMA film to a thermoset.

Since the cited references fail to present a *prima facie* case of either anticipation or obviousness over the present claims as amended, Applicant believes that the reasons for rejection have been overcome, and the claims herein should be allowable to the Applicant. Accordingly, reconsideration and allowance are requested.

Respectfully submitted;



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